OIPE

RAW SEQUENCE LISTING   DATE: 12/17/2001
PATENT APPLICATION: US/10/005,691   TIME: 11:08:42

Input Set : A:\Seqlist.txt
Output Set: N:\CRF3\12172001\J005691.raw

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     4 <110> APPLICANT: DUCKWORTH, DAVID
     5         MICHALOVICH, DAVID
     7 <120> TITLE OF INVENTION: NOVEL USE
    10 <130> FILE REFERENCE: GH-30003-D1
C-->12 <140> CURRENT APPLICATION NUMBER: US/10/005,691
C-->13 <141> CURRENT FILING DATE: 2001-11-08
    15 <150> PRIOR APPLICATION NUMBER: 09/107,847
    16 <151> PRIOR FILING DATE: 1998 06 30
    18 <150> PRIOR APPLICATION NUMBER: EP 97304996.8
    19 <151> PRIOR FILING DATE: 1997-07-08
    21 <160> NUMBER OF SEQ ID NOS: 2
    23 <170> SOFTWARE: FastSEQ for Windows Version 3.0
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    26 <211> LENGTH: 5715
    27 <212> TYPE: DNA
    28 <213> ORGANISM: HOMO SAPIENS
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    32 ctttagaact tggcaagtct cactagatac cttcaatcat cattttgagc tcaaagaatt   120
    33 ctgagactta tggttggtca tatagaagag gaccttgaac ctatagtttc ctgaagaatc   180
    34 agtttaaaag atccaaggag tacaaaagga gaagtacaaa tgtctactac aagacgaaaa   240
    35 cgtagtatgt tatgttgttt accgtaagct gtagtaaaat gagctcgatt gttgacagag   300
    36 atgacagtag tattttttgat gggttggtgg aagaagatga caaggacaaa gcgaaaagag   360
    37 tatctagaaa caaatctgaa aagaaacgta gagatcaatt taatgttctc attaaagaac   420
    38 tgggatccat gcttcctggt aatgctagaa agatggacaa atctactgtt ctgcagaaaa   480
    39 gcattgattt tttacgaaaa cataaagaaa tcactgcaca gtcagatgct agtgaaattc   540
    40 gacaggactg gaaacctaca ttccttagta atgaagagtt tacacaatta atgttagagg   600
    41 ctcttgatgg tttttttta gcaatcatga cagatggaag cataatatat gtgtctgaga   660
    42 gtgtaacttc attacttgaa catttaccat ctgatcttgt ggatcaaagt atatttaatt   720
    43 ttatcccaga aggggaacat tcagaggttt ataaaatact ctctactcat ctgctggaaa   780
    44 gtgattcatt aacccccagaa tatttaaaat caaaaaatca gttagaattc tgttgtcaca   840
    45 tgctgcgagg aacaatagac ccaaaggagc catctaccta tgaatatgta aaatttatag   900
    46 gaaatttcaa atctttaaac agtgtatcct cttcagcaca caatggtttt gaaggaacta   960
    47 tacaacgcac acataggcca tcttatgaag atagagtttg ttttgtagct actgtcaggt  1020
    48 tagctacacc tcagttcatc aaggaaatgt gcactgttga agaacccaat gaagagttta  1080
    49 catctagaca tagtttagaa tggaagtttc tgtttctaga tcacagggca ccacccataa  1140
    50 tagggtattt gccatttgaa gttctgggaa catcaggcta tgattactat catgtggatg  1200
    51 acctagaaaa tttggcaaaa tgtcatgagc acttaatgca atatgggaaa ggcaaatcat  1260
    52 gttattatag gttcctgact aaggggcaac agtggatttg gcttcagact cattattata  1320
    53 tcacttacca tcagtggaat tcaaggccag agtttattgt ttgtactcac actgtagtaa  1380
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    55 agacagctgc tgacaaaagc caagattctg ggtcagataa tcgtataaac acagtcagtc  1500
    56 tcaaggaagc attggaaagg tttgatcaca gcccaacccc ttctgcctct tctcggagtt  1560
    57 caagaaaatc atctcacacg gccgtctcag acccttcctc aacaccaacc aagatcccga  1620
    58 cggatacgag cactccaccc aggcagcatt taccagctca tgagaagatg gtgcaaagaa  1680
    59 ggtcatcatt tagtagtcag tccataaatt cccagtctgt tggttcatca ttaacacagc  1740
    60 cagtgatgtc tcaagctaca aattaccaa ttccacaagg catgtcccag tttcagtttt  1800
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 61 cagctcaatt aggagccatg caacatctga aagaccaatt ggaacaacgg acacgcatga 1860
 62 tagaagcaaa tattcatcgg caacaagaag aactaagaaa aattcaagaa caacttcaga 1920
 63 tggtccatgg tcaggggctg cagatgtttt tgcaacaatc aaatcctggg ttgaattttg 1980
 64 gttccgttca actttcttct ggaaattcat ctaacatcca gcaacttgca cctataaata 2040
 65 tgcaaggcca agttgttcct actaaccaga ttcaaagtgg aatgaatact ggacacattg 2100
 66 gcacaactca gcacatgata caacaacaga ctttacagag tacatcaact cagagtcaac 2160
 67 aaaatgtact gagtgggcac agtcagcaaa catctctacc cagtcagaca cagagcactc 2220
 68 ttacagcccc actgtataac actatggtga tttctcagcc tgcagccgga agcatggtcc 2280
 69 agattccatc tagtatgcca caaaacagca cccagagtgc tgcagtaact acattcactc 2340
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 71 ctgtagcttg tggggcagtc atggtaccta gtactatgct tatgggccag gtggtgactg 2460
 72 catatcctac ttttgctaca caacagcaac agtcacagac attgtcagta acgcagcagc 2520
 73 agcagcagca gagctcccag gagcagcagc tcacttcagt tcagcaacca tctcaggctc 2580
 74 agctgaccca gccaccgcaa caatttttac agacttctag gttgctccat gggaatccct 2640
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 79 ccagcagttt catgagatgc agtattgagt gttctagttc ctggaattag ttggcagaga 2940
 80 aaatgctgcc tagtgctaca gatgtacatt aaataccagc cagcaggagg tgatcatagg 3000
 81 ggcacagcca gttctgacag tgttttaggt gcctggatat tttttgatgg aaaaagaata 3060
 82 tattgccaaa tattaagaag ctcagctatg aaatgacctc cagggaatca gaaaggcact 3120
 83 aatgatgtta gtaactttta gtggttctgt gcctcttatc aagtgttaca gaggacatac 3180
 84 cactgccatg tcaggggttt gcttacagtg atgccatgaa gacagtccag tagacttggt 3240
 85 agcgaccccc tcccccaacc cctctccctt ttcagataat gatggaacag taattacttt 3300
 86 cagaatgttg tgtgggttca aattctctat gtacagatga tgtaaaaata tgtatatgtc 3360
 87 tagataaaag gagagaaagc aaaacatttt gtatgctgca tgaaagcgtt atctcttcct 3420
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 91 tggatttttt tttttcaggt taaattattg atacaacagg attttcaagt tattcagaaa 3660
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 95 tttgcacaca aaacatctta ggcacttttt aacattctca atcatgggaa tttttaacttt 3900
 96 tgggatttgt tgaaatcttt tttattatcc ttcacaattt caatgcttct tttagtcaga 3960
 97 aatgattcag ggttatttga ggggaaaaaa ccccatagtg ccttgatttt aattcaggtg 4020
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102 gtcatttaag aatttaccag aaatatttgc tcaatatgat cttgatattc ctacaaagaa 4320
103 aaaagaaggg gtagggattt ggctatgcct tcactacaac attagaatat tgtaactcac 4380
104 atgccttcta aacgtgaact aagattcct ttggcaatat catattctaa aagtaataaa 4440
105 ttccaataca agttacatac atttaaaaaa cattttacag attttatggt actaatgaaa 4500
106 tttacagtga tagaacaaaa gaggattagt agaaaataca ttattagaat ataaaaaatg 4560
107 ttattactga ggaaagggag gagaggacaa gtgtaataaa tcaaaattga cctcaaaaga 4620
108 aaatgtgtaa cagagttgag gttgttaaaa cagaaaaggt tctgaataat gaagattaac 4680
109 ctaatgcaga attgctaggt aaagaggtca ggggaatgct aagccagttc ttaagacttc 4740
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112 gtacttaccc ttctacaaaa gaagtgtgac tagatatcaa tcagtaatta acatatcaag   4920
113 gagctcttct agctaaatga ccatccagta gagatttccc acattcccat gaatatcaag   4980
114 aatagttgtc agaatatgta tgtacctgag catatgtaca cagacaaggg ggatgttgtg   5040
115 gaatatggca atagcattgt tcttctcccc tttcaaattg cctttcttga ccttatgcca   5100
116 ttccatatat atctgagttg tgcctcattt atttattggc aatacctagt gatacggatt   5160
117 tagctaacaa aagatatgaa gaactattat attgaggcct gtcctctaca taccacactt   5220
118 aaaagatggt gaactgtgag tactacttag gttgacagca acaaagcata agacaagccc   5280
119 caggtaaacg tctaaactgt ttactcacat tgtcctactc cagccccttc aattatttcc   5340
120 catctccaca aatagtcggg ggaaaaaatt aaaattttcc tttatgattc ttactgttct   5400
121 tcgcagctca tcttttcctg cttagaatta accattgcta atttaaagga gcagctagct   5460
122 gcttttctgt cagtctgaag cgtagtagtg gaagaggtag taagcaccag ctgcctcttt   5520
123 gctgctttgt tttcctcctg attctcttaa atttgggttg caaagctatc ccgcccccca   5580
124 ccctgcccca tgaaacttga gcattcaaat gaagattcag cagtgtctgt tcttcatttc   5640
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131 <211> LENGTH: 846
132 <212> TYPE: PRT
133 <213> ORGANISM: HOMO SAPIENS
135 <400> SEQUENCE: 2
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139              20                  25                  30
140 Lys Ala Lys Arg Val Ser Arg Asn Lys Ser Glu Lys Lys Arg Arg Asp
141          35                  40                  45
142 Gln Phe Asn Val Leu Ile Lys Glu Leu Gly Ser Met Leu Pro Gly Asn
143      50                  55                  60
144 Ala Arg Lys Met Asp Lys Ser Thr Val Leu Gln Lys Ser Ile Asp Phe
145  65                  70                  75                  80
146 Leu Arg Lys His Lys Glu Ile Thr Ala Gln Ser Asp Ala Ser Glu Ile
147              85                  90                  95
148 Arg Gln Asp Trp Lys Pro Thr Phe Leu Ser Asn Glu Glu Phe Thr Gln
149             100                 105                 110
150 Leu Met Leu Glu Ala Leu Asp Gly Phe Phe Leu Ala Ile Met Thr Asp
151         115                 120                 125
152 Gly Ser Ile Ile Tyr Val Ser Glu Ser Val Thr Ser Leu Leu Glu His
153         130                 135                 140
154 Leu Pro Ser Asp Leu Val Asp Gln Ser Ile Phe Asn Phe Ile Pro Glu
155 145                 150                 155                 160
156 Gly Glu His Ser Glu Val Tyr Lys Ile Leu Ser Thr His Leu Leu Glu
157             165                 170                 175
158 Ser Asp Ser Leu Thr Pro Glu Tyr Leu Lys Ser Lys Asn Gln Leu Glu
159             180                 185                 190
160 Phe Cys Cys His Met Leu Arg Gly Thr Ile Asp Pro Lys Glu Pro Ser
161             195                 200                 205
162 Thr Tyr Glu Tyr Val Lys Phe Ile Gly Asn Phe Lys Ser Leu Asn Ser
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PATENT APPLICATION: US/10/005,691   TIME: 11:08:42

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163       210                   215                   220
164   Val Ser Ser Ser Ala His Asn Gly Phe Glu Gly Thr Ile Gln Arg Thr
165   225                   230                   235                   240
166   His Arg Pro Ser Tyr Glu Asp Arg Val Cys Phe Val Ala Thr Val Arg
167                   245                   250                   255
168   Leu Ala Thr Pro Gln Phe Ile Lys Glu Met Cys Thr Val Glu Glu Pro
169                   260                   265                   270
170   Asn Glu Glu Phe Thr Ser Arg His Ser Leu Glu Trp Lys Phe Leu Phe
171               275                   280                   285
172   Leu Asp His Arg Ala Pro Pro Ile Ile Gly Tyr Leu Pro Phe Glu Val
173               290                   295                   300
174   Leu Gly Thr Ser Gly Tyr Asp Tyr Tyr His Val Asp Asp Leu Glu Asn
175   305                   310                   315                   320
176   Leu Ala Lys Cys His Glu His Leu Met Gln Tyr Gly Lys Gly Lys Ser
177                   325                   330                   335
178   Cys Tyr Tyr Arg Phe Leu Thr Lys Gly Gln Gln Trp Ile Trp Leu Gln
179               340                   345                   350
180   Thr His Tyr Tyr Ile Thr Tyr His Gln Trp Asn Ser Arg Pro Glu Phe
181               355                   360                   365
182   Ile Val Cys Thr His Thr Val Val Ser Tyr Ala Glu Val Arg Ala Glu
183   370                   375                   380
184   Arg Arg Arg Glu Leu Gly Ile Glu Glu Ser Leu Pro Glu Thr Ala Ala
185   385                   390                   395                   400
186   Asp Lys Ser Gln Asp Ser Gly Ser Asp Asn Arg Ile Asn Thr Val Ser
187                   405                   410                   415
188   Leu Lys Glu Ala Leu Glu Arg Phe Asp His Ser Pro Thr Pro Ser Ala
189               420                   425                   430
190   Ser Ser Arg Ser Ser Arg Lys Ser Ser His Thr Ala Val Ser Asp Pro
191               435                   440                   445
192   Ser Ser Thr Pro Thr Lys Ile Pro Thr Asp Thr Ser Thr Pro Pro Arg
193   450                   455                   460
194   Gln His Leu Pro Ala His Glu Lys Met Val Gln Arg Arg Ser Ser Phe
195   465                   470                   475                   480
196   Ser Ser Gln Ser Ile Asn Ser Gln Ser Val Gly Ser Ser Leu Thr Gln
197                   485                   490                   495
198   Pro Val Met Ser Gln Ala Thr Asn Leu Pro Ile Pro Gln Gly Met Ser
199               500                   505                   510
200   Gln Phe Gln Phe Ser Ala Gln Leu Gly Ala Met Gln His Leu Lys Asp
201               515                   520                   525
202   Gln Leu Glu Gln Arg Thr Arg Met Ile Glu Ala Asn Ile His Arg Gln
203               530                   535                   540
204   Gln Glu Glu Leu Arg Lys Ile Gln Glu Gln Leu Gln Met Val His Gly
205   545                   550                   555                   560
206   Gln Gly Leu Gln Met Phe Leu Gln Gln Ser Asn Pro Gly Leu Asn Phe
207               565                   570                   575
208   Gly Ser Val Gln Leu Ser Ser Gly Asn Ser Ser Asn Ile Gln Gln Leu
209               580                   585                   590
210   Ala Pro Ile Asn Met Gln Gly Gln Val Val Pro Thr Asn Gln Ile Gln
211               595                   600                   605
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            RAW SEQUENCE LISTING                    DATE: 12/17/2001
            PATENT APPLICATION:  US/10/005,691      TIME: 11:08:42

            Input Set : A:\Seqlist.txt
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212   Ser Gly Met Asn Thr Gly His Ile Gly Thr Thr Gln His Met Ile Gln
213       610                 615                 620
214   Gln Gln Thr Leu Gln Ser Thr Ser Thr Gln Ser Gln Gln Asn Val Leu
215   625                 630                 635                 640
216   Ser Gly His Ser Gln Gln Thr Ser Leu Pro Ser Gln Thr Gln Ser Thr
217                   645                 650                 655
218   Leu Thr Ala Pro Leu Tyr Asn Thr Met Val Ile Ser Gln Pro Ala Ala
219               660                 665                 670
220   Gly Ser Met Val Gln Ile Pro Ser Ser Met Pro Gln Asn Ser Thr Gln
221           675                 680                 685
222   Ser Ala Ala Val Thr Thr Phe Thr Gln Asp Arg Gln Ile Arg Phe Ser
223       690                 695                 700
224   Gln Gly Gln Gln Leu Val Thr Lys Leu Val Thr Ala Pro Val Ala Cys
225   705                 710                 715                 720
226   Gly Ala Val Met Val Pro Ser Thr Met Leu Met Gly Gln Val Val Thr
227               725                 730                 735
228   Ala Tyr Pro Thr Phe Ala Thr Gln Gln Gln Gln Ser Gln Thr Leu Ser
229           740                 745                 750
230   Val Thr Gln Gln Gln Gln Gln Gln Ser Ser Gln Glu Gln Gln Leu Thr
231           755                 760                 765
232   Ser Val Gln Gln Pro Ser Gln Ala Gln Leu Thr Gln Pro Pro Gln Gln
233       770                 775                 780
234   Phe Leu Gln Thr Ser Arg Leu Leu His Gly Asn Pro Ser Thr Gln Leu
235   785                 790                 795                 800
236   Ile Leu Ser Ala Ala Phe Pro Leu Gln Gln Ser Thr Phe Pro Gln Ser
237               805                 810                 815
238   His His Gln Gln His Gln Ser Gln Gln Gln Gln Gln Leu Ser Arg His
239           820                 825                 830
240   Arg Thr Asp Ser Leu Pro Asp Pro Ser Lys Val Gln Pro Gln
241           835                 840                 845
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VERIFICATION SUMMARY   DATE: 12/17/2001
PATENT APPLICATION: US/10/005,691   TIME: 11:08:43

Input Set : **A:\Seqlist.txt**
Output Set: **N:\CRF3\12172001\J005691.raw**

L:12 M:270 C: Current Application Number differs, Replaced Current Application Number
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date

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